J Quant Criminol
DOI 10.1007/s10940-014-9239-0

ORIGINAL PAPER

Investigating the Applicability of Macro-Level Criminology Theory to Terrorism: A County-Level Analysis

Joshua D. Freilich · Amy Adamczyk · Steven M. Chermak · Katharine A. Boyd · William S. Parkin

Abstract
Objectives This exploratory study examines if causal mechanisms highlighted by criminology theories work in the same way to explain both ideologically motivated violence (i.e., terrorism) and regular (non-political) homicides. We study if macro-level hypotheses drawn from deprivation, backlash, and social disorganization frameworks are associated with the likelihood that a far-right extremist who committed an ideologically motivated homicide inside the contiguous US resides in a particular county. To aid in the assessment of whether criminology theories speak to both terrorism and regular violence we also apply these hypotheses to far-right homicide and regular homicide incident location and compare the results.
Material and methods We use data from the US Extremist Crime Database (ECDB) and the FBI's SHR to create our dependent variables for the 1990–2012 period and estimated a series of logistic regression models.
Conclusions The findings are complex. On the one hand, the models we estimated to account for the odds of a far-right perpetrator residing in a county found that some hypotheses were significant in all, or almost all, models. These findings challenge the view

J. D. Freilich (✉)
Doctoral Program in Criminal Justice, Department of Criminal Justice, John Jay College, CUNY, New York, NY, USA
e-mail: jfreilich@jjay.cuny.edu

A. Adamczyk
Doctoral Program in Criminal Justice, Department of Sociology, John Jay College, CUNY, New York, NY, USA

S. M. Chermak
School of Criminal Justice, Michigan State University, East Lansing, MI, USA

K. A. Boyd
Department of Sociology, Philosophy, and Anthropology, University of Exeter, Exeter, UK

W. S. Parkin
Department of Criminal Justice, Seattle University, Seattle, WA, USA

Published online: 21 November 2014

that terrorism is completely different from regular crime and argues for separate causal models to explain each. On the other hand, we estimated models that applied these same hypotheses to account for the odds that a far-right homicide incident occurred in a county, and that a county had very high regular homicide rate. Our comparison of the results found a few similarities, but also demonstrated that different variables were generally significant for each outcome variable. In other words, although criminology theory accounts for some of the odds for both outcomes, different causal mechanisms also appear to be at play in each instance. We elaborate on both of these points and highlight a number of important issues for future research to address.

Keywords Social disorganization theory and terrorism · Macro-level criminology theories and terrorism · Domestic terrorism · Political violence

Introduction

This study examines if concepts derived from macro-level criminology frameworks are associated with the likelihood that a far-right extremist who committed an ideologically motivated homicide inside the contiguous US resides in a particular county. For the rest of this paper we refer to these offenders as far-right perpetrators (FRPs).[1] We also examine if these hypotheses account for the odds that an ideologically motivated far-right homicide incident (FRHI) or regular homicide incident occurred in a county. This paper makes three important contributions.

First, we investigate if the causal mechanisms highlighted by criminology theories work in the same way to explain both ideologically motivated violence (i.e., terrorism) and regular (non-political) homicides. Recently, criminologists have begun paying more attention to the etiology of terrorism (Hamm 2007). But, aside from testing rational choice, routine activities and related models (Dugan et al. 2005; Hamm 2007), few studies have empirically tested major criminology theories such as anomie, strain, disorganization, or control approaches in a terrorism context (Agnew 2010; Akyuz and Armstrong 2011; Dugan and Young 2009; LaFree and Dugan 2009; Shecory and Laufer 2008).

On the one hand, this is surprising since terrorism involves violent crimes (Clarke and Newman 2006; Freilich et al. 2009a, b; Sutherland and Cressey 1978: 3). Criminology theories explain why individuals commit illegal acts, and/or why some locations or time periods have higher crime rates than others. The major criminology frameworks were set forth more than 65 years ago to primarily explain juvenile delinquency. Over time these frameworks have been refined and applied to violent and property offenses, cyber-crime, sex offending, white collar crimes and bias crimes. It therefore makes sense to also use these theories to explain the etiology of terrorism.

On the other hand, some criminologists have questioned if theories devised to explain "regular" crime should be used to study terrorism. While terrorism typically focuses on a political or ideological objective, regular crime often involves personal motives such as greed. Hence, criminology theories, like social disorganization, may not be applicable to ideologically motivated crimes. This paper's first contribution is to investigate this important issue.

[1] This paper compares the characteristics of counties where FRPs resided to counties where they did not reside. It does not compare the counties where FRPs resided to counties where far-left or Al Qaeda affiliated perpetrators who also committed ideologically motivated violence resided. Please see Chermak et al. (2015) for an in depth investigation of the latter issue.

Second, we focus on the American far-right, one of the most deadly extremist movements in the US that poses a threat to public safety. Most terrorism researchers investigate international and foreign terrorist campaigns (LaFree et al. 2009, 2012) or study why individuals join the "global jihad" against the West (Bakker 2006; Jurgensmeyer 2003; Sageman 2004; Stern 2003). Much of the terrorism focus inside the US has been on Al Qaeda and related groups (Hamm 2007; Krueger and Alan 2008; Silber et al. 2007). Homegrown terrorist and extremist criminal movements in the US have been understudied. Freilich et al.'s (2009a, b) survey of American state police agencies found that almost all respondents strongly agreed that Islamic Jihadists were the top national security threat.

But, the far-right[2] was also seen as representing a severe danger to national and individual state securities. The US Extremist Crime Database (ECDB) study finds that supporters of Al Qaeda and affiliated movements committed over 35 homicide incidents that claimed over 3,000 lives since 1990. Far-rightists, however, committed over 155 ideologically motivated homicide events that took almost 400 lives in this same period (Freilich et al. 2014; see also Blejwas et al. 2005; Handler 1990; Hewitt 2003; Smith 1994). Etiological underpinnings of terrorism may differ depending upon the type of terrorists involved (Chermak et al. 2009, 2015; Krueger 2007). It is thus appropriate to disaggregate terrorism, like this study does, to focus on the far-right since it varies from other major terrorists threats in the US.[3]

Third, this project uses a novel outcome measure of far-right ideological violence, the county in which the FRPs resided at the time they committed the fatal ideologically motivated attack. Previous studies have usually investigated variation in where the act was committed across states and (on rare occasions) counties in the US (Webb and Cutter 2009). A few studies have investigated the country of origin for perpetrators of transnational terrorist campaigns (Berrebi 2009). No study has focused on where the perpetrators resided at the time of the attack inside the US. It is important to investigate if there is anything unique about the counties where perpetrators resided when they committed these attacks.

This exploratory study examines if macro-level criminology hypotheses are able to account for the odds of a FRP residing in a county. One reason for this study's exploratory nature is that certain macro-level hypotheses like poverty and diversity are "claimed" by more than one theory (Freilich and LaFree 2015). For these hypotheses we summarize the different causal mechanisms that could be unfolding.[4] In the discussion we assess which theory's arguments best account for the findings.

[2] As outlined in prior work (Freilich et al. 2014; see also Freilich et al. 2009), the far-right is operationalized as individuals or groups that subscribe to aspects of the following ideals: "… [far-rightists are] fiercely nationalistic (as opposed to universal and international in orientation), anti-global, suspicious of centralized federal authority, reverent of individual liberty (especially their right to own guns, be free of taxes), believe in conspiracy theories that involve a grave threat to national sovereignty and/or personal liberty and a belief that one's personal and/or national "way of life" is under attack and is either already lost or that the threat is imminent (sometimes such beliefs are amorphous and vague, but for some the threat is from a specific ethnic, racial, or religious group), and a belief in the need to be prepared for an attack either by participating in or supporting the need for paramilitary preparations and training or survivalism. Importantly, the mainstream conservative movement and the mainstream Christian right are not included."

[3] Hamm (2007; see also Smith and Damphousse 2009) found that the far-right and Islamic jihadists commit different crime types in the United States. Far-right terrorists have been found on average to be older, and more likely to be male, religious, poorer and less educated and to operate in rural areas in the US compared to far-left terrorists (Gruenewald et al. 2013a, b; Handler 1990; Hewitt 2003; Smith 1994; Smith and Morgan 1994).

[4] We recognize the critique that FRPs may be transients who recently moved into their residence and were not influenced by the characteristics of the county to which they just moved. We discuss how we addressed this important issue in FN 12 in the data and methods section.

We next set forth hypotheses derived from macro-level criminology theories to explain county-level variation of FRP residency. To aid in the assessment of whether criminology theories speak to both terrorism and regular (non-political) violence we also apply these hypotheses to FRHI location, and regular homicide location and compare the results.

Using Standard Criminological to Explain Far-Right Violence

Our first hypothesis is that *counties that are more economically deprived are more likely to have FRPs residing there (H_1).* Both deprivation models and social disorganization theory suggest this hypothesis (Bursik 1988; Bursik and Grasmick 1993; Merton 1938).

Deprivation theories argue that impoverished areas provide fewer opportunities for their residents to succeed in American life. Crime may be used to achieve financial success since legal options are unavailable (Merton 1938). Individuals in these areas may become socially isolated from mainstream life. These areas may have certain markets and life styles that attract criminal outsiders to the area who exacerbate the crime problem (Messner and Rosenfeld 2007). Poverty has also been associated with far-right extremism (Lipset and Raab 1977). Some have argued that far-rightists living in deprived areas would be more likely to target ideological enemies that they blame for the deprivation in these impoverished locations (Pridemore and Freilich 2006).

Social disorganization theory likewise predicts that impoverished areas will be more likely to have FRPs, but makes a different causal argument. Kornhauser's (1978) classic critique of criminology frameworks argued that Shaw and McKay's (1976; see also Durkheim 1930) social disorganization theory was best classified as a macro-level control theory. Shaw and McKay contended that the structural factors of poverty, racial diversity, and population turnover led to social disorganization or lower levels of social control.[5] Bursick (1988: 521) explains that "social disorganization refers to the inability of local communities to realize the common values of their residents or solve commonly experienced problems." Disorganized neighborhoods with lower levels of social control were unable to regulate—control—their young males and had higher crime rates.

Here we apply social disorganization theory to FRPs committing ideologically motivated fatal attacks. The claim is that the far-right movement is violent partially because it attracts violent individuals (Blazak 2001; Bjørgo 1995; Gibson 1994; Hamm 1993). Ezekiel (1995) argued that the allure of violence motivated some individuals to join the movement. Others have noted that the far-right purposefully recruits violent persons. Many far-right white supremacist gangs are active in prisons and other non-prison groups like the Aryan Nations have sought to attract both current and former prisoners (Blazak 2001; Hamm 2002).

Compared to other social movements, the far-right movement may be more likely to use violence to attack their enemies. This study will examine if integrated areas are better able to control far-right residents. More impoverished areas lack the resources needed to maintain communal entities that promote social integration. These locations are less able to monitor individuals and maintain public order and should be more likely to have FRPs[6] (Bursik 1988; Kornhauser 1978; Sampson and Groves 1989; Shaw and McKay 1976).

[5] Subsequently, other structural factors were added such as mixed land use, population density, dilapidation, the changing economy and employment opportunities, etc (Sampson 2012; Stark 1987; Wilson 1996).

[6] Lyons (2007) Chicago hate crimes' study found that anti-white hate crimes were more common in socially disorganized neighborhoods, while anti-black hate crimes occurred in organized areas. Although, almost all

The next three hypotheses highlight diversity, a concept long used to account for regular crime, as well as ideologically motivated violence. Both social disorganization theory and backlash frameworks suggest hypotheses two, three and four: *Counties with higher levels of racial and ethnic diversity are more likely to have FRPs residing there (H_2); counties with a Jewish congregation are more likely to have FRPs residing there (H_3), and counties with a Muslim congregation are more likely to have FRPs residing there (H_4).*

Social disorganization theory argues that racial and ethnic heterogeneity, and presumably religious differences, undermine social cohesion. Various racial and ethnic groups, and religious denominations we argue, may subscribe to different cultures, traditions and expectations that at times conflict with one another (Anderson 2000; Lee 2008; Shaw and McKay 1976). These differences "can make it difficult to form and maintain community solidarity and social cohesion" (McVeigh and Cunningham 2012: 5). Communities with lower levels of social integration will be less able to maintain social order. As a result counties with higher levels of racial and religious diversity should have higher odds of having a FRP.

Backlash perspectives make the same three predictions, but rely upon different causal mechanisms. Rather than linking diversity to lower levels of social cohesion, backlash frameworks argue that advances by minority groups and other less powerful groups result in historically powerful groups feeling threatened. Threatened groups conclude that their power is at risk and lash out with violence against the challenging groups (Blalock 1967). Some American far-rightists, in other words, conclude that their privileged position as white, Christian, males is threatened by the rising numbers and power of other groups (Freilich and Pridemore 2007; Gibson 1994; Lipset and Raab 1977).

Far-right racists are concerned about immigration, especially non-white migration, and interracial marriage because they are seen as diluting traditional white male Christian power in the US (Barkun 1997; Blazak 2001; Freilich et al. 2014; Gibson 1994; Green et al. 1999; Hamm 1993; Simi and Futrell 2010). The far-right is worried about current demographic trends that indicate the non-white population in America is rising and will overtake the current white majority. Soule and Van Dyke's (1999) research, for example, suggests that Black church bombings in the 1990s were influenced by such backlash processes. These findings and arguments imply that higher numbers of non-whites in mainly white areas are especially likely to set in motion these backlash processes (Green et al. 1998; Lyons 2007).

Footnote 6 continued
the FRPs in our study are white, we expect our findings will differ from Lyons results. First, we are focusing on homicides, while Lyons study excluded homicides. Lyons concludes that anti-black hate crimes occurred because white youths were "defending" their neighborhoods that were changing demographically (from white to more diverse). But, we expect that whites in changing neighborhoods would encourage actions like "routine" assaults or vandalism to "defend" their area (Freilich et al. 1999). Many whites, we suspect, would oppose the commission of exceptionally brutal assaults and homicides that may generate (negative) media coverage that could undermine their local support. Second, in addition to anti-minority hate homicides, our study also included other large categories of incidents such as anti-government homicides. Lyons did not study these types of crimes. Third, most hate crimes are committed by non-extremist youths acting in groups. Thus, few of the perpetrators in Lyons study were far-rightists, while all of the perpetrators in our study are far-rightists. Fourth, far-right racists are often stigmatized by mainstream society and many retreat to "free spaces" that allow them to act upon their beliefs away from society's negative gaze (Simi and Futrell 2010). Such individuals are unlikely to be integrated into a county's political and social elite or communal life (Beyerlein and Hipp 2005: 995). Finally, we examine county-level variation while Lyons focused on neighborhoods.

While historically criminologists have focused on racial and ethnic diversity we wonder if religious diversity plays a similar role today (Disha et al. 2011; King and Brustein 2006). Some far-rightists are anti-semitic and subscribe to conspiracy theories that blame the Jews for undermining American sovereignty, the white race, and individual liberties (Aho 1990; Hamm 1993; Ezekiel 1995). Certain American racist far-rightists blamed the Jews for the 9/11 attacks. Importantly, many far-rightists criticize non-Christian immigration and especially Middle-Eastern Muslim migrants (Freilich et al. 2009). Most of the far-right is intensely nationalistic and patriotic (Freilich et al. 1999, 2014) and some segments blamed all Muslims for the September 11th strikes. In the weeks following the attacks far-right white supremacists committed two anti-Muslim revenge homicide attacks (Parkin 2012). Disha et al.'s (2011) study looked at all hate crime offending against Arabs and Muslims in the US (not just those committed by far-rightists). They found that counties with larger concentrations of Arabs and Muslims also had more incidents of such hate crimes.

Our fifth hypothesis is *that counties with a higher proportion of divorces are more likely to have FRPs residing there (H_5).* This hypothesis is based upon both social disorganization theory and strain models. The divorce rate is frequently used to measure social cohesion, a major construct in social disorganization theory. Communities with higher rates of divorce are thought to be more "socially disintegrated" and thus less able to exert social control by supervising, for instance, others and maintaining social order (also Bursik and Grasmick 1993: 272; Goetz et al. 2012: 4; McVeigh and Cunningham 2012: 12).

Divorce has also been seen as a "stressor" that increases a person's frustration making crime more likely. Agnew's (1992) General Strain Theory, a micro-level theory part of the anomie/strain tradition in criminology, claims that individuals are more likely to commit crime when they lose positive valued stimuli. These persons may turn to crime to alleviate the stress, to recover what they lost, or lash back at those blamed for the loss. Divorce is one such commonly stimuli that could produce these processes (Agnew 1992, 2001; Broidy and Agnew 1997). While originally GST only set forth individual-level arguments, it has subsequently added macro-level processes (Agnew 1999; Wareham et al. 2005).

We now turn to hypotheses that only rely upon social disorganization arguments. The sixth hypothesis is that *counties with people expressing lower levels of trust in others are more likely to have FRPs residing there (H_6).* In the last 25 years social disorganization theory has been extended (Sampson 2012). Increasingly, attention has been paid to operationalizing conceptual constructs associated with social integration. We could not locate a single study that examined if trust levels were also predictive of terrorism (Akyuz and Armstrong 2011). Sampson et al. (1997) have pointed to collective efficacy as a key mechanism. Collective efficacy consists of "two underlying constructs: (1) social cohesion and trust and (2) informal social control in relation to widely held goals of public safety and crime prevention" (Lyons 2007: 819). These factors add to our understanding of why crime rates differ across areas. When social capital and trust is high there are greater levels of interconnectedness and individuals are more involved in communal life (Putnam 1995, 2000; see also Bellair 1997; Beyerlein and Hipp 2005; Goetz et al. 2012: 2). Warner (2007) notes that a common measure of trust is asking whether people believe that others can be trusted. This study will be the first to investigate the impact of social cohesion and trust in a terrorism context. To do this we innovatively use opinion data from the general social survey (GSS). The GSS is a bi-annual survey of public opinion of the US population and it is one of the most frequently analyzed sources of information in the social sciences, but has rarely been used in studies of terrorism.

Social disorganization theorists similarly maintain that residential turnover undermines community cohesiveness and makes it more difficult to entrench communal civic

engagement (Bursik and Grasmick 1993; Lee 2008; Shaw and McKay 1976). McVeigh and Cunningham (2012: 5) explain that "population turnover in particular can exacerbate social disorganization because strong bonds can take years to form and require frequent meaningful interactions among neighbors and other community members." Interestingly, similar factors have also been set forth as a partial explanation for the growth of far-right extremism (Lipset and Raab 1977; Nice 1988). We *therefore predict that counties with higher levels of residential instability are more like to have FRPs residing there (H_7).*

Beyerlein and Hipp (2005) and others have associated certain religious denominations with higher or lower levels of social capital. The focus is on social capital that is not limited to bonding within a group, but with links to individuals from different groups. This is called bridging social capital. Evangelical and fundamentalist Christian denominations are thought to be more focused on the "next world" as opposed to this world. Subscribers to these denominations are also more likely to only engage with fellow members of their group (Scheitle and Adamczyk 2009). These individuals are less engaged in civic life and are less likely to maintain ties with persons from other groups or with the broader community (Beyerlein and Hipp 2005; Goetz et al. 2012). Mainline Protestant and Catholic adherents are less concerned with the "afterlife," are outward looking, and are more concerned with the doings of this world. Adherents to these belief systems are more engaged with communal life in the broader community, including those from different groups (Beyerlein and Hipp 2005; Wuthnow 2004). Areas where such congregations are more numerous should have higher levels of bridging social capital and lower crime rates (Beyerlein and Hipp 2005; Goetz et al. 2012; Lee 2000). We thus hypothesize that *counties with a lower proportion of mainline Protestant and Catholic adherents are more likely to have FRPs residing there (H_8).*

Counties (and other units of analyses) differ in the number of "potential" offenders residing in them. Most macro-level studies account for the rate of males aged 14–29 because it is assumed that greater numbers of such individuals mean more potential offenders (since young males commit a disproportionate amount of violent crime). We argue that the far-right movement is not evenly distributed across the US. It is small and stigmatized (Simi and Futrell 2010). Some counties (such as rural Vermont or certain large urban areas) may have few, far-right extremists living there. As a result, some counties have a reduced chance for a FRP simply because there are few far-rightists living there. We use far-right presence as a proxy to capture the climate of far-right extremism in a county. We expect that counties with a far-right presence will have a culture more sympathetic to far-right ideology. These counties should have greater numbers of both formal members of far-right organizations, and unaffiliated individuals who share the movement's ideology even though they do not belong to any established group. We *hypothesize that counties with a far-right presence are more likely to have FRPs residing there (H_9).*

We will also explore two research questions (RQs) that are critical to understanding the relationships between macro-level factors and both political violence and regular violence to see if the same processes are at play. The first relates to our decision to use an outcome that captures where perpetrators resided when they committed the homicide. Almost all etiological terrorism studies examine where the terrorist act was committed. We looked at the county location of far-right homicide incidents and the correlation between that and where the FRP resided was over 0.7. Thus, while the two measures are closely associated they are not the same. We investigate *if there are stronger effects of our independent variables for where the FRPs resided (perpetrator residency) when they committed the attack as opposed to where the FRHI occurred (i.e., location of the attack) (RQ_1).*

Our second research question explores if the determinants of regular homicides and political violence overlap or differ. We investigate this by applying our nine hypotheses to both FRHI and regular homicide incident location. *We examine whether the independent variables work in the same way for both FRHI and regular homicide incident location* (RQ_2).[7]

Below is a summary of the nine hypotheses we test, and the two research questions we investigate:

H_1: Counties that are more economically deprived are more likely to have FRPs residing there [(1) deprivation/anomie; (2) social disorganization].
H_2: Counties with higher levels of racial and ethnic diversity are more likely to have FRPs residing there [(1) backlash; (2) social disorganization].
H_3: Counties with a Jewish congregation are more likely to have FRPs residing there [(1) backlash; (2) social disorganization].
H_4: Counties with a Muslim congregation are more likely to have FRPs residing there [(1) backlash; (2) social disorganization].
H_5: Counties with a higher proportion of divorces are more likely to have FRPs residing there [(1) social disorganization; (2) strain/anomie].
H_6: Counties with people expressing lower levels of trust in others are more likely to have FRPs residing there (social disorganization).
H_7: Counties with higher levels of residential instability are more like to have FRPs residing there (social disorganization).
H_8: Counties with a lower proportion of mainline Protestant and Catholic adherents are more likely to have FRPs residing there (social disorganization).
H_9: Counties with a far-right presence are more likely to have FRPs residing there.
RQ_1: We investigate if there are stronger effects of our independent variables for where the FRPs resided at the time they committed the attack as opposed to where the FRHI occurred (i.e., county where the attack was committed).
RQ_2: We investigate if the hypotheses work as predicted and in the same way for both FRHI and regular homicide incident location.

Data and Methods

County as Unit of Analysis

The far-right is more susceptible to structural, cultural, and communal characteristics on the county-level as opposed to either the state-level or a smaller ecological level. The far-right is suspicious of the federal government and it grants a special emphasis to county-level authority. The far-right group Posse Comitateus and far-right Sovereign Citizens, for example, only recognize county sheriffs as a legitimate authority to be obeyed and refuse to countenance other forms of government (Freilich et al. 1999). Far-right movements often organize on and are involved in the political process on the county-level (McVeigh and Cunningham 2012). The far-right movement has committed ideologically motivated violence in both rural and urban areas in the U.S. (Freilich et al. 2014; Hewitt 2003; Lee

[7] We are unable to make a comparison of FRP county residency to the perpetrators of regular homicides county residency because the latter information is unavailable. The FBI's SHR only includes information on homicide incident location and does not report perpetrator residency location.

2008; Smith 1994). Finally, because of the small number of cases in our dependent variables we obtain more variation on the county-level than for neighborhoods and other smaller ecological units.

Dependent Variables

Our exploratory study focuses on ideologically motivated homicides committed by far-rightists between 1990 and 2012 in the contiguous US. We created three sets of outcome variables that measure: (1) whether a FRP resided in a county at the time of the attack (i.e., FRP residency), (2) whether a far-right homicide incident was committed in the county (i.e., FRHI location)[8]; and (3) whether a county has a particularly high proportion of regular homicides. The overwhelming majority (i.e. 96 %) of counties in the contiguous US did not experience far-right fatal violence. Only 112 counties had FRPs residing them, and 105 counties had FRHIs committed in them.

The first two sets of dependent variables were created using data from the open source US Extremist Crime Database (ECDB).[9] The ECDB tracks violent and financial crimes committed by political extremists in the US (Freilich et al. 2014) and it has proved to be a valid source of data on fatal ideologically motivated attacks[10](Chermak et al. 2012). For a county to be coded as "1" for our FRP and FRHI dependent variables the homicide had to be committed by a far-right extremist to further far-right ideology (e.g. the homicide was anti-government, anti-minority, or anti-abortion, etc.) and the FRP resided in the county at the time of the homicide; or the FRHI was committed in the county, respectively.

Turning to the first set of dependent variables, which measure the county where FRPs resided, we were able to determine county of residence for 89 % of the perpetrators in the database.[11] Between 1990 and 2012 these FRPs resided in 112 counties[12] and we use these

[8] We only focused on FRHI that were committed by far-rightists in the contiguous (48 of the 50) US. Due to data limitations and methodological concerns, it is common for criminological research to sample from geographic regions located solely within the contiguous, continental US (Kaminski 2008; Lester 1996; Loftin and Hill 1974; Rosenfeld et al. 2007).

[9] Recent studies have relied on the ECDB to examine the evolution of domestic extremist groups (Freilich et al. 2009), differences between violent and non-violent extremist groups (Chermak et al. 2013), comparisons between far-right homicides and "regular" non-extremist homicides (Gruenewald and Pridemore 2012), fatal far-right attacks against the police (Freilich and Chermak 2009; Suttmoeller et al. 2013) and lone wolf attacks (Gruenewald et al. 2013a, b).

[10] The ECDB's incident identification and coding is a multi-stage process (Freilich et al 2014). First, open-source publications (e.g. the FBI, GTD, and Southern Poverty Law Center's Intelligence Report) and databases are used to identify cases that could fit the inclusion criteria. Additional incidents are identified in online newspaper articles. After potential incidents are identified, we systematically search more than 30 open-source search engines and databases to collect all publically available information on the homicide events. A coder then reads the documents, verifies that the incident met the inclusion criteria, conducts additional open-source searches, and codes each incident. Variables coded relate to the incident, the offenders, the victims, and the reliability of the open-source documentation. This coding process was iterative and reliability was increased through coder training and multiple coders examining each incident (Freilich et al. 2014).

[11] The vast majority of the FRPs in this study were arrested. However, 14 of the perpetrators were technically not arrested. Six of these perpetrators committed suicide before their arrest, and 5 were killed by law enforcement before they could be arrested. Three others were involved in a prison murder. For all 14 perpetrators the open source information that we collected specifically discussed their linkage to the homicide and described their extremist activities.

[12] The ECDB only includes the FRP's county of residence at the time of an incident and does not include the length of time the perpetrator resided in the county before engaging in an attack. To assess the likelihood that a FRP lived in the county for at least a year before committing a homicide, and would, therefore, be

data to create three measures. We first conducted an analysis of the entire 1990–2012 period. Importantly though, to better establish the correct time order between the predictors and dependent variable we also conducted analyses of where FRPs resided between 1990 and 2000 and between 2001 and 2012. Because only 4 % (N = 112) of counties had a FRP in residence and most only had only one or two during the 22-year time period, we coded these outcomes variables dichotomously where 0 = no FRP in residence and 1 = FRP in residence. Further, for the separate analyses of the 1990s and 2000s the number of counties that had a FRP in residence was cut in half.

Similarly, we created three dependent variables to measure the county where the FRHI was committed for the same time periods: (1) 1990–2012; (2) 1990–2000; and (3) 2001–2012. Here too we use dichotomous measures where 0 = far-right incident did not occur and 1 = far-right incident occurred because most counties that had a far-right homicide experienced just one incident during the 22-year time period, and there was a small number of counties (N = 105) that had any far-right homicides

Finally, we wanted to investigate if the same factors that shape the location of regular homicides also shape the location of FRHIs. However, unlike FRHIs, 90 % of American counties experienced a regular homicide between 1990 and 2012. To statistically compare coefficients we needed a dichotomous measure of regular homicides that matched our dichotomous measure of far-right homicide incidences. Additionally, we needed a measure that was theoretically similar in rarity to the measure of far right incidences. We chose to use the top 10 % of counties with the highest rate of homicides to create a measure of high regular homicides where 0 = a county that was below the 90th percentile in the rate of homicides and 1 = the 90th percentile or higher of the rate of homicides. We used data from the FBI's supplemental homicide reports (SHRs) to create measures for the same time periods as we used for the other dependent variables: (1) 1990–2012; (2) 1990–2000; and (3) 2001–2012.

Independent Variables

Descriptive statistics of all variables can be found in Table 1. The first key predictor is percentage below the poverty level. Estimates from 1989 to 1999 were taken from the U.S. Census Bureau (1990a, a). We calculated poverty as the percentage of households in the county that are below the poverty level.

Footnote 12 continued
susceptible to county-level influences (in that they were exposed to the county's characteristics for an extended period), we randomly selected 20 % of the FRPs (N = 59). We searched these FRPs in the web-engines BeenVerified.com and Ancestry.com to locate information about them. We also reviewed the open-source information collected on these FRPs in the ECDB to see if other sources, such as the media or court documents, specified how long the FRP had resided at the location. No conclusive information was found for 57 % of these FRPs, but we verified the residency for 25 FRPs (43 % of the sample). Twenty-two FRPs (88 %) were determined to live in their county of residency for at least one year prior to the incident, while only 3 FRPs were deemed known transients. Thus, close to 90 % of the FRPs we found information on had resided in the county for at least one year prior to committing a far-right homicide. While some (American) terrorists may engage in conduct to evade capture and take steps (e.g. using aliases) to "stay off the radar" and thus little information exists on their whereabouts (Cothren et al. 2008), FRPs do not fall into this category. The overwhelming number of FRPs in the ECDB was prosecuted for homicides that though they were ideologically motivated were the outcome of (situational) presented opportunities, as opposed to carefully planned strikes.

Table 1 Descriptive statistics for variables included in the analysis (N = 3,109)

	Mean	SD	Min	Max
Key outcome variables				
County with far-right perpetrator (FRP) in residence (1990–2012)	0.036	0.186	0	1
County with FRP in residence (1990–2000)	0.025	0.157	0	1
County with FRP in residence (2001–2012)	0.017	0.128	0	1
County with far-right homicide incident (FRHI) (1990–2012)	0.034	0.181	0	1
County with FRHI (1990–2000)	0.023	0.148	0	1
County with FRHI (2001–2012)	0.015	0.123	0	1
County with high percentage (top 10 %) of regular homicides (1990–2012)	0.100	0.300	0	1
County with high percentage (top 10 %) of regular homicides (1990–2000)	0.100	0.300	0	1
County with high percentage (top 10 %) of regular homicides (2001–2012)	0.100	0.300	0	1
Predictor variables from 1990[a]				
Percentage urban population	36.584	29.974	0	100
Population in 1,000s	79.460	264.727	0	8,863.164
Percentage below poverty level (1989)	16.218	7.685	0	61.284
High racial/ethnic diversity (more than 30 %)	0.302	0.459	0	1
Jewish congregation in county	0.186	0.389	0	1
Percentage of people in county divorced	5.840	1.456	1.503	12.086
People can be trusted (1993–2000)	1.750	0.127	1.416	2.038
Residential stability	54.463	8.016	12.242	78.328
Percentage of adherents mainline Protestant	27.578	16.179	0	100
Percentage of adherents Catholic	26.800	24.902	0	100
Number of far-right groups per 10,000 people, 1990–2001	0.376	1.236	0	23.071
Predictor variables from 2000[b]				
Percentage urban population	40.154	30.937	0	100
Population in 1,000s	89.932	293.514	0.067	9,519.338
Percentage below poverty level (1999)	13.725	6.293	0	56.415
High racial/ethnic diversity (more than 30 %)	0.371	0.483	0	1
Jewish congregation in county	0.198	0.398	0	1
Muslim congregation in county	0.136	0.342	0	1
Percentage of people in county divorced	7.524	1.589	1.685	16.487
People can be trusted (2002–2010)	1.719	0.134	1.374	2.076
Residential stability	55.228	7.159	14.145	78.012
Percentage of adherents mainline Protestant	24.127	15.003	0	100
Percentage of adherents Catholic	29.654	25.933	0	100
Number of far-right groups per 10,000 people, 2002–2012	0.534	1.876	0	43.375

[a] Unless otherwise specified, all measures are from 1990

[b] Unless otherwise specified, all measures are from 2000

For county-level racial and ethnic diversity we use the racial and ethnic diversity index calculated by the U.S. Census Bureau (2001). The diversity index reports the percentage of times two randomly selected people will differ by race/ethnicity. This measure is dichotomized[13] so that 0 = <30 % chance that two random people will be of a different race/ethnicity and 1 = more than a 30 % chance of being of a difference race/ethnicity.

We use the association of religion data archive (ARDA) 1990 and 2000 Religious Congregations and Membership Study's county files to create a measure of Jewish congregational presence[14] where 0 = no Jewish congregation and 1 = at least one Jewish congregation. Most Jewish congregations worship at a synagogue, presenting a visible symbol of their presence in the county, and there is high overlap[15] between a county having any Jews and a Jewish congregation. Like the 2012 attack on the Sikh Temple in Wisconsin, we suspect that the presence of Jews and a highly visible symbol, such as a synagogue, may incite anger in potential FRPs.

Muslims constitute an even smaller proportion of religious people in America than Jews. We create a similar measure of Muslim congregation presence where 0 = no Muslim congregations and 1 = at least one Muslim congregation. Unfortunately, the ARDA[16] does not have any county-level data from 1990 that includes a measure for Muslims or Muslim congregational presence. However, they have a Muslim congregation measure for 2000 that we use.

The measure of divorce rates is taken from the US Census Bureau and indicates the percentage of people in a county that are divorced. Our measure of trust relies on data from the General Social Survey (GSS). The GSS is a bi-annual survey of public opinion of the US population. Researchers can apply for the geographical identifiers (i.e. FIPS codes) of where survey respondents reside. Public opinion data from the GSS is used to calculate county-level measures of trust. The GSS only includes approximately 2,000–2,500 respondents in their bi-yearly surveys. Hence, to create a measure of county trust we merged 1993–2000 survey waves and for the 2000 measures we merge data from 2002 to 2010. On average counties had 20 individual responses contributing to each county-level estimate, but some counties had fewer. To account for differences in reliability we use a Bayesian average to create a weighted mean of trust for each county. With a Bayesian average the mean in a county with few respondents lies closer to the overall sample mean, accounting for the lower reliability that comes with fewer respondents. Conversely, as the number of respondents in a county rises, the mean increasingly reflects the actual mean, rather than the sample mean. The measure of trust is based on a question that asked, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" The response categories were 1 = cannot be too careful, 2 = it depends, and 3 = most people can be trusted.

[13] We also conducted the analysis using the undichotomized variable and the direction and significance are the same as when this measure is used.

[14] We considered calculating the percentage of Jews in each county, but they constitute only about 2 % of the US religious landscape and only 4 % of counties have a Jewish population that exceeds 5 %.

[15] In a separate analysis we looked at the relationship between having any Jews in the county and a county having a Jewish congregation. In 1990 over 62 % of counties that had any Jews also had a congregation, and in 2000 the overlap was 93 %. The results of our multivariate analyses were very similar (significant and in the same direction), regardless of what measure (any Jews present or a Jewish congregation in the county) was used.

[16] The ARDA stores the major source of data on religious groups in America. The Glenmary Research Center is the organization that publishes the data. We contacted them directly to see if they knew of a 1990 county-level measure. They did not think that a reliable measure exists for 1990.

For our 2000 measure of residential stability we use data from the US Census Bureau to calculate the percentage of people over age 5 that were in the same house in 2000 that they were in 1995. For the 1990 measure we use a measure of the percentage of people over age five that were in the same house as they were in 1985. Measures of percentage mainline Protestant and Catholic are taken from the ARDA's 1990 and 2000 Religious Congregations and Membership Study's county files. We calculated the percentage using only the mainline Protestant religious groups included in both the 1990 and 2000 data files.[17]

Finally, our measure of far-right presence/culture is operationalized as both the number of far-right anti-minority hate groups and far-right anti-government patriot groups per 10,000 people for 1990–2001 and 2002–2012. These measures were derived from the Southern Poverty Law Center's (SPLC) Annual Hate Group Listing Reports,[18] and the Annual Militia/Patriot Group Listing Reports. For some groups the county in which the hate or patriot group was located was provided by the SPLC, but for many others we had to open source search for this information. In all, the SPLC reports included 8,630 far-right groups (5,420 were hate groups and 3,210 were patriot groups) located within the 3,107 US counties between the years 1990 and 2012.[19]

Control Variables

Terrorist incidences are more likely to occur in counties that have larger populations and are located near cities, which have densely populated areas (Webb and Cutter 2009). We rely on measures of population size and percentage urban from 1990 to 2000, which were obtained from the US Census Bureau. Population is measured as the number per 1,000 people (U.S. Census Bureau 1990b, 2000c). Percentage urban is measured as the proportion of the population that is residing in an urban area (U.S. Census Bureau 1990b, 2000c).[20]

[17] The mainline Protestant groups that were included in both the 1990 and 2000 data collections were: American Baptist Churches in the USA, Christian Church (Disciples of Christ), Congregational Christian Churches, Episcopal Church, Moravian Church in America, National Association of Congregational Christian Churches, Presbyterian Church (USA), Reformed Church in America, United Church of Christ, and United Methodist Church.

[18] The SPLC's Hate Group Listing places groups into several categories. We combined racist skinheads, skinheads, identity, white nationalists, Ku Klux Klan, Neo-Confederates, and Neo-Nazis in the white hate group count and excluded Black hate groups since FRPs are almost 100 %.White.

[19] The SPLC published both reports annually (since 1994 for militia/patriots and 1990 for hate groups). Although scholars have questioned the SPLC's procedures (Chermak 2002; Freilich and Pridemore 2006), they have used the same strategies to identify organizations over time (SPLC, 2011).Unlike law enforcement agencies and others that compile intelligence information only on criminally active groups, the SPLC tracks violent and non-violent groups.

[20] There were other variables from the ARDA, US Census, and Uniform Crime Report that we considered including as controls, such as, percentage Evangelical, female headed households, male, African American, white, foreign born, response to the US census, homeowner occupancy rate, unemployment rate, economic inequality index, number of police, per capita police pay, and the ratio of female to male wages. We also considered several GSS variables that were tied to our theoretical concepts. None of these variables contributed to any unique variation in our dependent variables (i.e. no significant effects) or meaningfully changed any of our key findings.

Methods

It is rare for a county to have either a FRP or a FRHI. Again, between 1990 and 2012 there were only 105 counties that had a FRHI and 112[21] counties that had a FRP in residence. Initially, we considered developing a panel model that matched 1990 predictor variables to attacks occurring between 1990 and 2000, and 2000 predictor variables matched to attacks occurring between 2001 and 2012. However, because of the rarity of the outcome, we were unable to fit a panel model for two separate periods.

We decided to conduct three separate analyses. The first set of analyses focus on the 22-year time period between 1990 and 2012 for the three outcome variables (i.e. FRP residence, FRHI, and very high regular homicide rates) using predictor variables that were measured in the 1990s. These outcomes are all dichotomous, so logistic[22] regression analysis techniques are used. To be able to test our two research questions, coefficients need to be compared across models. We, therefore, stack the three models and estimate their coefficients simultaneously. We then test for significant ($p < 0.05$) differences in the effect sizes of all predictor variables across models.

A similar analysis is conducted for the three dependent variables (i.e. FRP residence, FRHI, and very high regular homicide rates) that were measured between 1990 and 2000 using predictors from the 1990s; and an analysis for the three dependent variables that were measured between 2001 and 2012 using predictors from the 2000s.[23] These last two analyses reduce the maximum amount of time between the IV's and DV's from 22 years to about 10 years.

We also considered using mixed models and treating states as a higher unit of analysis. However, for FRP residence and FRHI location little variation remained at the state level (well below 10 %). Rather than include states as an additional level of analysis, our models account for the clustering of standard errors at the state level. Additionally, we considered adding a spatial component to our models. In a preliminary analysis we created spatially lagged variables for FRPs and FRHIs in counties. While some of these variables were significant, it was unclear if the significance was due to a spatial process where FRP or FRHI cluster independent of county characteristics, or if the significance is really a function of the county characteristics.[24] By accounting for the clustered standard errors for counties within states we are able to obtain unbiased estimators. We also compared the results of the analyses with and without the spatial variables and found that almost all of the county variables are significant in both sets of models.

[21] There is a higher number of perpetrator counties than incident counties because multiple perpetrators could have been involved with one incident.

[22] To account for the rarity of the dependent variable, we considered using a procedure suggested by King and Zeng (2001) for generating approximately unbiased and lower-variance estimates of logit coefficients and their variance–covariance matrix. Unfortunately, we could not find a way to use this procedure while also estimating the three models simultaneously, and testing for significant differences in the coefficients across models. Additionally, for the most part the direction of the coefficients and significance levels differed minimally regardless of the modeling technique.

[23] We considered only presenting an analysis for the entire 22 time-period using key predictors from the 1990s. Most of the independent and control variables from 1990 to 2000 are highly correlated at 0.90 and above. However, some characteristics (i.e. divorce rates, 9–11) about the US changed over the 22-year time span.

[24] GeoDa allows one to run regression analysis to investigate this relationship, however to the best of our knowledge the program does not model binary outcome data.

For all of the variables, except for trust, there was very little (i.e. 1.4 %) missing data. Again, our trust measure was taken from GSS individual-level measures. Ultimately, there were only 333 counties between 1990 and 2012 that had the trust measure. Because so much data are missing for trust, we used multiple imputation techniques to create 400 full datasets to be estimated and combined. In addition to maintaining the largest sample size possible, multiple imputation techniques take full advantage of the available data and avoid some of the bias in standard errors and test statistics that can accompany listwise deletion (Allison 2001). As the number of datasets increase, the reliability of the estimates for the missing values also increases. To further boost reliability, in the imputation process we included not only all of the variables in the models, but all of the other variables available from the government and the ARDA mentioned in FN 20. Regardless of the number of imputations, the direction and significance level of trust changed minimally, and beyond 100 imputations, the standard error for trust did not decrease. Additionally, in a separate analysis we compared the estimates from the multiply imputed sample to a listwise deleted sample with and without trust, and the findings for all variables were very similar.

Results

In Table 2 we present our multivariate logistic regression analysis of the influence of 1990 county-level variables on far-right perpetrator's (FRP) county of residence, county where far-right homicide incident (FRHI) occurred, and counties with very high regular homicide rates for 1990–2012. The first model focuses on FRP's county of residence. The first hypothesis posits that more economically deprived counties will be *more* likely to have FRP's residing there. Model 1 shows the opposite relationship. As the percentage in poverty increases, the odds of a FRP residing in the county decrease by 5.5 %. Since this relationship is different from what we expected, we did some additional analysis[25] to ascertain that poverty and not another similarly related measure was producing the effect. One of the things we examined was the mean and median income in a county. In a bivariate analysis counties with higher mean[26] and median incomes were more likely to have a FRP, which is consistent with the bivariate and multivariate results for poverty. While people living in high poverty areas may be more likely to engage in regular crime, counties where FRP's reside are not characterized by high levels of poverty or significantly lower incomes. The second hypothesis is also unsupported, as there is no significant ($p < 0.05$) relationship between racial and ethnic diversity and the odds of a FRP residing in the county.

Consistent with the third hypothesis, counties with a Jewish congregation have over three times the odds of having a FRP than counties without one. Consistent with the fifth hypothesis, a 1 % increase in divorced people is associated with a 23 % increase in the odds of a county having a FRP. There is no significant relationship between higher levels

[25] In a separate analysis we found that poverty was significantly and highly (at least 0.66) correlated with a Gini index of economic inequality and the county's unemployment rate. However, when entered with poverty, these two coefficients were in the opposite direction. Higher levels of unemployment and more economic inequality were associated with greater odds of a FRP. We considered including economic inequality and unemployment in the full analysis, but they were not significant when entered with the remaining variables in the final model. We also considered combining them with poverty to develop an overall measure of deprivation, but the three variables were operating in different directions with the dependent variable.

[26] The mean 1990 income in a county with a FRP was $36,927, and in a county without a FRP it was $29,456. We would have used mean income instead of poverty, but poverty was a more robust indicator and remained significant when other variables were entered.

Table 2 Logistic regression of the influence of county-level variables on far right perpetrator's (FRP) county of residence, far-right homicide incident (FRHI) in county, and high proportion of regular homicides in county for 1990–2012 (N = 3,109)

	Model 1: County with FRP in residence (1990 IV and 1990–2012 DV)			Model 2: County with FRHI (1990 IV and 1990–2012 DV)			Model 3: County with high proportion of regular homicides (1990 IV and 1990–2012 DV)		
	Coef.	95 % CIs		Coef.	95 % CIs		Coef.	95 % CIs	
Percentage urban population	1.010^{+}	0.999	1.021	1.008^{+}	0.999	1.017	1.011	0.996	1.026
Population in 1,000s	1.002***	1.002	1.003	1.002***^{,b}	1.001	1.002	1.001^{+}	1.000	1.001
Percentage below poverty level (1989)	0.945*^{,a}	0.905	0.988	0.979^{b}	0.941	1.019	1.062***	1.028	1.098
High racial/ethnic diversity	0.531$^{+,a}$	0.267	1.057	1.054^{b}	0.558	1.988	14.749***	7.519	28.932
Jewish congregation in county	3.132***	1.821	5.387	2.659***	1.582	4.468	4.075***	2.486	6.680
Percentage of people in county divorced	1.225*	1.028	1.461	1.362***	1.191	1.556	1.269*	1.036	1.553
People can be trusted (1993–2000)	0.409	0.025	6.664	0.414	0.022	7.759	0.693	0.088	5.464
Residential stability	0.958*	0.920	0.997	0.961*^{,b}	0.924	0.999	1.036^{+}	0.995	1.078
Percentage of adherents mainline Protestant	0.968**^{,a}	0.945	0.992	0.991	0.969	1.012	1.011^{c}	0.994	1.029
Percentage of adherents Catholic	0.988*^{,a}	0.976	0.999	1.000^{b}	0.990	1.010	0.981**	0.969	0.993
Number of far-right groups per 10,000 people, 1990–2001	1.133*	1.029	1.249	1.083*	1.006	1.165	0.984	0.810	1.195
Constant	0.879	0.002	412.906	0.086	0.000	52.082	0.000**	0.000	0.028
Pseudo R^2	0.308			0.291			0.350		

Missing data were handled with multiple imputation techniques. All variables, except for trust, were missing <2 % of cases. Trust was missing over 90 %, and we therefore, imputed 400 datasets

IV independent variables, *DV* dependent variable

$^{+}$ <0.10; * <0.05; ** <0.01; *** <0.001

[a] Significant ($p < 0.05$) difference between coefficient in FRP's county of residence and FRHI in county models

[b] Significant ($p < 0.05$) difference between coefficient in FRHI in county and high proportion of regular homicides in county models

[c] Significant ($p < 0.05$) difference between coefficient in FRP's county of residence and high proportion of regular homicides in county models

of trust and a county having a FRP. There is, however, support for the seventh hypothesis. As the percentage of people who remained in the same home for at least 5 years increase, the odds of having a FRP in the county decrease. Model 1 also offers support for Hypothesis 8 that counties with a higher percentage of mainline Protestants and Catholics are less likely to have a FRP. Specifically, for every percentage increase in mainline Protestants, the odds of having a FRP decreases by about 3 %. Likewise, for every percentage increase in the percentage Catholic, the odds of having a FRP decrease by about 1.2 %. The ninth hypothesis is also supported. Each increase in the number of far-right groups is associated with a 13 % increase in the odds of a county having a FRP.

Model 2 presents the coefficients for the same predictor variables as Model 1 on the odds that a county will experience a far-right homicide incident (FRHI). Turning to our first research question, as we tentatively expected that poverty would have a greater effect on the odds that a county will have a FRP in residence than a county will have a FRHI. Model 2 shows that poverty has a greater effect on a county having a FRP. Likewise, a higher percentage of mainline Protestants and Catholics is associated with greater odds that a county will have a FRP, than a county will have a FRHI.

Model 3 presents the coefficients for explaining whether or not a county will have a particularly high proportion of regular homicides. Two of the same predictor variables that are associated with a county having a FRHI are also associated with a county having a particularly high proportion of regular homicides. These variables are having a Jewish congregation and the percentage of divorced people. Conversely, population size and residential stability have a greater effect on the odds of a county having a FRHI. Likewise, the percentage of residents living in poverty, high racial and ethnic diversity, and the percentage Catholic have a greater effect on the odds that a county will have a high proportion of regular homicides than a county will have a FRHI.

Table 3 limits the analysis to the 10-year period between 1990 and 2000. The first model shows that *all* of the same predictor variables that were significant in the analysis of FRP county residence for the 22-year period are also significant for the 10-year period. The second model shows that two of the three variables that were significant for explaining a county having a FRHI between 1990 and 200 are significant for the longer period. The percentage mainline Protestant and Catholic continues to have a greater inverse effect on the odds of a county having a FRP in residence than a county having a FRHI. However, the poverty level no longer has a greater effect on FRP residence than a county having a FRHI.

Table 4 focuses on the eleven-year period between 2001 and 2012. The number of counties with a FRP decreased from 79 between 1990 and 2000 to 52 between 2001 and 2002. Likewise, the number of counties with a FRHI decreased from 70 to 48. The reduced number of counties with FRP's in residence or FRHIs limits the power available to detect significant effects for this relatively rare event. Nevertheless, Model 1 shows that four of the seven variables that were significant in the previous tables are also significant for explaining the odds of a FRP being in residence between 2001 and 2012. These are poverty, having a Jewish congregation, percentage divorced, and the percentage of mainline Protestants.

Since this set of models focus on the period between 2001 and 2012, we can include the measure of whether having a Muslim congregation is associated with any of the outcomes. Consistent with Hypothesis 4, Model 1 shows that having a Muslim congregation more than doubles the odds that a FRP will have resided in the county. Model 2 also shows that having a Muslim congregation is associated with higher odds of a county having a FRHI. Whereas the models from previous periods found that the percentage mainline Protestant and Catholic had greater effects on FRP residence than a county having a FRHI, only the

Table 3 Logistic regression of the influence of county-level variables on FRP's county of residence, FRHI in county, and high proportion of regular homicides in county for 1990–2000 (N = 3,109)

	Model 1: County with FRP in residence (1990 IV and 1990–2000 DV)			Model 2: County with FRHI (1990 IV and 1990–2000 DV)			Model 3: County with high proportion of regular homicides (1990 IV and 1990–2000 DV)		
	Coef.	95 % CIs		Coef.	95 % CIs		Coef.	95 % CIs	
Percentage urban population	1.010	0.995	1.025	1.012^{+}	1.000	1.025	1.001	0.988	1.014
Population in 1,000s	1.002***	1.001	1.003	1.001***	1.001	1.002	1.001**	1.000	1.002
Percentage below poverty level (1989)	0.932**	0.893	0.972	0.960$^{+,b}$	0.919	1.003	1.046*^{,c}	1.003	1.091
High racial/ethnic diversity	0.671^{a}	0.336	1.342	1.329^{b}	0.651	2.714	12.328***^{,c}	7.071	21.494
Jewish congregation in county	2.641**	1.336	5.222	2.386**	1.234	4.616	3.579***	1.987	6.446
Percentage of people in county divorced	1.313**	1.108	1.556	1.334**	1.132	1.573	1.251*	1.020	1.535
People can be trusted (1993–2000)	0.829	0.024	28.236	0.725	0.025	21.312	0.856	0.094	7.809
Residential stability	0.962*	0.927	0.998	0.966$^{+,b}$	0.930	1.004	1.033$^{+,c}$	0.997	1.070
Percentage of adherents mainline Protestant	0.972*^{,a}	0.945	1.000	1.000	0.974	1.028	1.008^{c}	0.993	1.023
Percentage of adherents Catholic	0.984*^{,a}	0.968	1.000	0.995	0.982	1.009	0.980**	0.968	0.992
Number of far-right groups per 10,000 people, 1990–2001	1.142*	1.018	1.282	1.077	0.986	1.175	0.914^{c}	0.767	1.088
Constant	0.105	0.000	201.151	0.016	0.000	29.391	0.001**	0.000	0.093
Pseudo R^2	0.306			0.275			0.306		

Missing data were handled with multiple imputation techniques. All variables, except for trust, were missing <2 % of cases. Trust was missing over 90 %, and we therefore, imputed 400 datasets

IV independent variables, *DV* dependent variable

$^{+}$ <0.10; * <0.05; ** <0.01; *** < 0.001

[a] Significant ($p < 0.05$) difference between coefficient in FRP's county of residence and FRHI in county models

[b] Significant ($p < 0.05$) difference between coefficient in FRHI in county and high proportion of regular homicides in county models

[c] Significant ($p < 0.05$) difference between coefficient in FRP county of residence and high proportion of regular homicides in county models

Table 4 logistic regression of the influence of county-level variables on FRP county of residence, FRHI in county, and high proportion of regular homicides in county for 2001–2012 (N = 3,109)

	Model 1: County with FRP in residence (2000 IV and 2001–2012 DV)			Model 2: County with FRHI (2000 IV and 2001–2012 DV)			Model 3: County with high proportion of regular homicides (2000 IV and 2001–2012 DV)		
	Coef.	95 % CIs		Coef.	95 % CIs		Coef.	95 % CIs	
Percentage urban population	1.019^{+}	0.999	1.039	1.009	0.991	1.028	1.014*	1.001	1.027
Population in 1,000s	1.000	1.000	1.001	1.000	1.000	1.000	1.001*	1.000	1.001
Percentage below poverty level (1999)	0.929*	0.871	0.991	0.984^{b}	0.939	1.030	1.091***^{,c}	1.057	1.126
High racial/ethnic diversity	0.595	0.260	1.361	1.026^{b}	0.473	2.226	8.489***^{,c}	4.326	16.657
Jewish congregation in county	3.219**	1.633	6.346	3.034**	1.480	6.218	1.898**	1.180	3.053
Muslim congregation in county	2.757**	1.350	5.629	3.561***^{,b}	1.891	6.705	1.654*	1.065	2.568
Percentage of people in county divorced	1.230*	1.028	1.472	1.305***	1.133	1.503	1.176*	1.002	1.381
People can be trusted (2002–2010)	0.159	0.006	4.485	0.039^{+}	0.001	1.427	0.797	0.091	6.984
Residential stability	0.965	0.911	1.023	0.957^{b}	0.900	1.019	1.051*^{,c}	1.007	1.096
Percentage of adherents mainline Protestant	0.926***	0.890	0.963	0.948**^{,b}	0.912	0.986	1.013	0.995	1.032
Percentage of adherents Catholic	0.999^{a}	0.983	1.014	1.008^{b}	0.992	1.025	0.988	0.976	1.000
Number of far-right groups per 10,000 people, 2002–2012	1.097	0.952	1.263	1.123	1.000	1.262	1.043	0.971	1.120
Constant	0.623	0.001	355.840	1.874	0.002	1504.180	0.000***	0.000	0.011
Pseudo R^2	0.304			0.296			0.274		

Missing data were handled with multiple imputation techniques. All variables, except for trust, were missing <2 % of cases. Trust was missing over 90 %, and we therefore, imputed 400 datasets

IV independent variables, *DV* dependent variable

$^{+}$ <0.10; * <0.05; ** <0.01; *** <0.001

[a] Significant ($p < 0.05$) difference between coefficient in FRP county of residence and FRHI in county models

[b] Significant ($p < 0.05$) difference between coefficient in FRHI in county and high proportion of regular homicides in county models

[c] Significant ($p < 0.05$) difference between coefficient in FRP county of residence and high proportion of regular homicides in county models

percentage Protestant is significant here. Additionally, the effect size of percentage mainline Protestant does not significantly differ for a county having a FRP in residence versus a FRHI.

Model 3 shows that many of the same predictor variables (e.g. poverty, racial and ethnic diversity, Jewish congregation, percentage divorced) that were significant in previous models continue to be significant. Additionally, poverty and racial and ethnic diversity continue to have a greater effect on the odds of a county having a high proportion of regular homicides than a FRHI. Some new differences between the odds of a county having a far-right homicide incident versus a high proportion of regular homicides also emerge. Having a Muslim congregation has a greater effect on the odds of a county having a FRHI versus a high proportion of regular homicides. Additionally, the percentage of mainline Protestants matters more for a county having a FRHI versus a high proportion of regular homicides.

Finally, there are some important limitations to this study that warrant mention. While we may be the first to examine the influence of county-level trust on FRP residency, the measure we had was far from ideal. Because there were so much missing data, we had to impute trust for close to 90 % of counties. We did several things to increase confidence in the use of this measure, including creating 400 datasets, using many additional auxiliary measures to impute the missing data, and taking into consideration the number of individuals in a county when creating the measure. Theoretically, trust seems like an important factor for shaping the outcomes. But, likely because so much data were missing, trust was not significant in any of our models. We hope future research will continue to consider how to better operationalize theoretical constructs like trust, while also having data for more counties. Future research might, for example, consider using "Google Insights for Search" to see whether the topics (e.g. homes security systems) people are searching for in a given county provide a useful and reliable measure for concepts like trust.

We should also note that because few counties (thankfully) experienced a far-right incident, we had a rare outcome, which created some challenges in constructing our models and deciding what would be a meaningful theoretical comparison for regular homicides. Moreover, because the number of far-right incidences has decreased over the last decade, we had even less power to detect significant effects for 2000–2012 than we did for the previous decade. We would have, for example, liked to have used a panel model, but it was not possible.

Discussion

This exploratory study investigated the applicability of using standard macro-level criminology theory to explain political violence in two ways. First, we examined whether hypotheses drawn from criminology theory account for the odds that a FRP resided in a county. Second, we applied these same hypotheses to FRHI location, and odds of a county having very high regular homicide rates and compared the results. The findings are complex.

On one hand, the models we estimated to account for the odds of a FRP residing in a county explained over 30 % of the variation, which is quite high. Importantly, three of our hypotheses (Jewish congregation, divorce, and mainline Protestant) were significant in all three (1990–2012; 1990–2000; 2001–2012) FRP models, three other hypotheses (residential instability, Catholic, and far-right presence/culture) were significant in two of the three models and one (Muslim congregation) was significant in the only model where it

was possible to test it. These findings suggest that hypotheses drawn from the macro-level criminology frameworks that were devised to explain regular crime are also able to account for some portion of the odds of a FRP residing in a county. These findings challenge the view that terrorism is completely different from regular crime and argues for separate causal models to explain each (Hirchi and Gottfredson 2001).

On the other hand, we also estimated models that applied these same hypotheses to account for the odds that a FRHI occurred in a county, and that a county had very high regular homicide rates to see if the same causal mechanisms could explain each. The findings showed a few similarities, but also demonstrated that different variables were generally significant for each outcome variable. In other words, although criminology theory accounts for some of the odds for both outcomes, different causal mechanisms also appear to be at play in each instance.

We elaborate on both of these points and seek to put all the findings in context. We also highlight a number of important issues for future research to address. We begin by discussing the application of criminology hypotheses to explain county-level variation in FRP residency.

Even though two developed theoretical positions of deprivation and social disorganization claimed that more impoverished counties were more likely to have FRPs living there this hypothesis (H_1) was not supported. Indeed, our models found that poverty was significant in the *opposite direction* than predicted. FRPs were less likely to reside in counties with higher levels of poverty. We found this result in all three FRP models. Extrapolating from the social movement literature, far-right leaders may concentrate their efforts on counties where residents have something to lose. As we noted when discussing backlash frameworks, parts of the far-right claim that they are protecting their supporters from subordinate groups that seek to overtake them (McVeigh 2009).

It is interesting to compare this finding that FRPs were *less likely* to reside in the most deprived counties with micro-level studies that have found far-right terrorists in the US to be more economically deprived than both other terrorists and the general population (Ezekiel 1995; Hamm 1993; Handler 1990; Smith 1994). Research using data from the ECDB found that over 40 % of the FRPs who committed ideologically motivated homicides in the US since 1990 were unemployed at the time of the attack (Gruenewald et al. 2013a, b; see also Blazak 2001; Ezekiel 1995; Hamm 1993). Thus, in less impoverished counties that have something to lose, it is more deprived individuals who become FRPs. Since these counties are not diverse and are composed primarily of whites, it appears that the economically deprived (white) FRPs are surrounded by more affluent white persons. Perhaps FRPs are angered that they are worse off than their white neighbors and were motivated to attack due to feelings of relative deprivation (Blazak 2001).

Relative deprivation models converge with deprivation/anomie/strain frameworks that argue that frustration/anger/stress that result from failing to achieve financial success or other goals may result in crime. Persons commit crimes to either achieve goals that cannot be legally accomplished, lash out at enemies blamed for their failures, or as a release for their frustration (Agnew 1992, 2010). Thus, although poverty was significant in the opposite direction than hypothesized it is possible that the overall macro and micro-level processes unfolding are the product of relative deprivation that is consistent with the deprivation perspective. Future qualitative research that interviews FRPs and uses ethnographic strategies could explore if this indeed the case.

Earlier we explained that our hypotheses regarding racial diversity and religious diversity could be justified by both social disorganization and backlash theories. The racial diversity hypothesis (H_2) was not supported in any of the models. The religious diversity

hypotheses were supported. Counties that had a Jewish congregation were more likely to have FRPs residing there (H_3). This variable was significant in all three FRP models. There was also support for the claim that counties with Muslim congregations were more likely to have FRPs (H_4). We were only able to include the Muslim congregation variable in the 2001–2012 model. We found that counties with at least one Muslim congregation had over double the odds of having a FRP in residence, and this was strongly significant. Again, some segments of the far-right are anti-Semitic and anti-Muslim. Parts of the far-right have blamed both groups for the 9/11 attacks.

The findings that FRPs are more likely to reside in counties where Jewish and Muslim congregations are present are intriguing when juxtaposed with incident and victim-level patterns of far-right fatal attacks. The most common far-right ideologically motivated homicide event is driven by anti-racial or ethnic minority views, followed by anti-government beliefs, anti-homeless, anti-gay and other motivations (Freilich et al. 2014). Far-right anti-Jewish and anti-Muslim homicides account for less than 4 % of all such ideologically motivated homicides (Parkin 2012; see also Kaplan 1995). On the county-level religious diversity is related to FRPs residence but racial diversity is not. On the incident/victim-level the most common far-right homicide is fueled by anti-minority beliefs while religiously motivated fatal strikes are few and far between.

Since classic social disorganization theory highlights the importance of racial diversity (we had to infer our religious diversity hypotheses based upon this framework) its non-significance does not support the disorganization model. On the other hand, taken together these seemingly disparate patterns appear consistent with backlash arguments. Ezekiel's (1995) ethnography notes that the leadership of the racist right highlights the Jews as the most serious threat to the White race's survival. Jews are seen as the literal offspring of the Devil who encourage non-whites to migrate into the country to undermine the white majority, dilute racial purity, and to commit crimes against whites (Barkun 1997; Ezekiel 1995; Ferber 1998; Gibson 1994). While racial minorities are disliked, they are viewed as the foot soldiers of the Jews who are the true enemy (Barkun 1997; Ezekiel 1995; Ferber 1998). On the other hand, many recruits into the racist far-right are motivated to join due to racist beliefs against racial and ethnic minorities. These new recruits often have had no contact with Jews and do not have strongly held beliefs about them one way or the other. These recruits need to be taught to include Jews as their enemies (Ezekiel 1995; Kaplan 1995).

We wonder whether far-right leaders who are most concerned about the "Jewish" (threat) and (for many leaders since 9/11 the) "Muslim" enemy (threat) focus their attention and activities on counties where adherents of these two religions reside. The focus on these counties encourages FRPs to take action (thus explaining our county-level finding). But, when FRPs strike they seek out members of the groups they are most focused upon, racial and ethnic minorities, (therefore, explaining the incident and victimization patterns just outlined). Finally, we again note that backlash models point to resentment and anger as motivating factors and in that sense converge with relative deprivation and other strain frameworks.

Our fifth hypothesis that counties that had higher divorce rates were more likely to have FRPs residing there was supported. This variable was statistically significant for the entire 22-year period and for both the 1990–2000 and the 2001–2012 periods. This hypothesis was suggested by both social disorganization and general strain theories. High divorce rates have long been viewed as an indicator of disorganization under the assumption that they undermine social cohesion (fewer available guardians, etc.). Despite the steady increase in divorce rates, and its current normative attributes, this variable has not lost its

force as an indicator of disorganization in the most recent time period. While divorce has also been categorized as a stressor this is usually done on the individual as opposed to macro-level. We tentatively view its significance as more supportive of social disorganization as opposed to strain/anomie. Future research could further unpack this issue to better identify if strain or control processes are working.

Surprisingly, there was no support for the sixth hypothesis. The trust variable was in-significant for all three time periods. One of the advances of our study was that we aggregated up individual responses from the GSS that focused on whether respondents trusted others. Similar questions have been used to measure collective efficacy and related constructs. Consistent with criminological research in the middle to late 1900s, terrorism studies testing disorganization models have not included this construct. It is possible that since the GSS only had respondents from 10 % of the counties in the US, which forced us to multiply impute a large number of cases, the overwhelming number of missing values at issue influenced this finding. It is clear that future research must return to this issue and consider how key conceptual constructs like trust and social cohesion can be properly operationalized on the county-level.

There was partial support for the seventh hypothesis that counties with greater levels of residential instability would be more likely to have FRPs residing there. It is thought that residential instability disrupts social bonds and undermines the social cohesiveness of the area. This variable was significant for both the full 22-year period and for the 1990–2000 period. The indicator was not significant for the 2001–2012 period, but because there were so many fewer FRHI's during this timeframe, there was also less power to detect effects

We also found support for the eighth hypothesis related to bridging social capital. Counties that had more mainline Protestant were less like to have FRPs residing there. This variable was significant in the expected direction in all three time periods, while the Catholic variable was significant for both the entire 22-year period, and 1990–2000 timeframe. This makes sense because adherents of these denominations are focused on this world, as opposed to the next one, and are more likely to build bonds with members of other religions and community organizations thus strengthening communal solidarity. In addition, there was partial support for the ninth hypothesis. The variable we used as a proxy to capture the climate of far-right extremism in a county was significant in both the full 22-year period, and the 1990–2000 time-frame.

We now turn to the FRHI models. Here too it appears that criminology theory can partially explain the etiology of a FRHI occurring in a county. Our first research question focused on whether there were stronger effects for our independent variables for where the FRPs resided at the time they committed the attack as opposed to where the FRHI occurred. Although the results are mixed and do not strongly support our prediction, it may be premature to entirely dismiss this possibility.

Similar to the FRP models, divorce and the Jewish congregation hypotheses were significant in all three FRHI models (1990–2012, 1990–200; 2001–2012) while Muslim presence was significant in the only model (2000–2012) it could be included. In the 1990–2012 models, however, poverty and the two bridging social capital variables-mainline Protestant and Catholic—were significant in accounting for the odds of a FRP, but were in-significant in accounting of the odds of a FRHI in a county. For all three variables there were significant (0.05) differences between their coefficients in the FRP and FRHI models. These findings imply that the bridging social capital that a high proportion of mainline Protestants and Catholics bring to counties may discourage the development of FRP's or dissuade potential FRP's from relocating to the county. These findings were inconsistent, however, because in the other two time periods there were no significant

differences between their coefficients in the FRP and FRHI models. This was an important issue to explore since almost all prior studies have examined incident location as opposed to perpetrator residence. Future research should continue to examine perpetrator residency- in addition to incident location- and consider how theoretical constructs play out similarly or differently in these two contexts.

We now turn to our second research question that assesses whether macro-level criminology theories speak to both terrorism and regular crime by applying these hypotheses to FRHI county location, and regular non-political homicide county location and comparing the results. We wanted to determine if the same causal mechanisms were at play in each outcome. The findings were complicated because some variables acted in the same way for both FRHI and regular homicides, while other variables acted differently and sometimes contradicted the criminology hypotheses.

Three variables (divorce, Jewish congregation and Muslim congregation) accounted for both a FRHI occurring in a county and the odds of a county having a very high regular homicide rate. These findings provide partial support for the applicability of using criminology theory to explain both terrorism and regular crime. It appears that higher levels of disorganization, as represented by divorce, may translate into increased odds for both political violence and regular homicide occurring in a county.

Previously we interpreted the Jewish and Muslim variables accounting for part of the odds of FRP and FRHI residing/occurring in county as the product of backlash processes. We noted that backlash models like relative deprivation/strain models highlight stress/frustration as key a mechanism. We raise the possibility that similar mechanisms may account for these two variables significance in explaining part of the odds of a county having a very high regular homicide rate. Survey research has documented that Jews and Muslims are among the wealthier segments of society. We wonder whether Jewish and Muslim congregations (visible structures) in the county create feelings of relative deprivation in other county residents in different parts of the same county (such as rural areas, or certain urban neighborhoods). Many criminologists have argued that the frustration and anger resulting from relative deprivation result in the use of violence generally not necessarily only targeting those seen as causing the frustration. Such processes account for regular crime, including violence. Indeed, a whole area of criminology examines the relationship between general income inequality and regular violence, and income inequality between and among racial/ethnic groups, and regular violence including homicide. We hope that future research investigates whether these relative deprivation processes are in fact at play here.

Before turning to other hypotheses we want to again stress that religious variables were significant in every model for all three sets of dependent variables. This bolsters the call for criminological researchers to also investigate the effects of religion. It is perplexing to consider the divide that exists between the criminological and terrorism literatures in terms of studying religion. Unlike most criminological studies, terrorism researchers often include religious factors, sometimes as a key predictor variable (Jurgensmeyer 2003; Stern 2003).

The trust variable was in-significant in all the SHR models as it was in both the FRP and FRHI models. As noted though it could be that this variable's large number of missing values influenced this result. Finally, and as expected, although the far-right presence/culture variable plays some role in accounting for the odds of FRHI in a county it was not significant in any of the SHR models and thus sheds no light on regular homicides.

Importantly, we found significant differences in the coefficients for both poverty and racial/ethnic diversity between all three FRHI and all three SHR models (1990–2012;

1990–2000; 2001–2012) that we estimated. Both poverty and racial/ethnic diversity in all three models increased the odds of a county having a very high regular homicide rate. Both of these variables acted in the way the criminology hypotheses predicted. Conversely, recall diversity and poverty did not significantly increase the odds of a FRHI occurring in a county.[27]

Thus, two attributes representing key constructs in social disorganization, backlash, and deprivation theories work in different ways in explaining both political violence and regular violence. Since other variables work the same way for both it seems that while criminology theory is partially applicable to terrorism these models need to be refined for the political violence context.

Conclusion

This exploratory paper has taken the first steps in terrorism research to understand the extent to which general theories of crime apply to politically motivated violence. Nevertheless, more needs to be done. This study only focused on far-right ideologically motivated fatal violence in the US. Future studies could extend this approach to the other major extremist groupings currently operating in the US such as supporters of Al Qaeda and environmental and animal rights' terrorism. It is equally important to extend the focus beyond the US to other nations and especially non-Western contexts.

Another important issue relates to what the comparison group of regular non-political violence should include. This study used all homicides from the FBI's SHRs. However, in the US perpetrators of FRHIs are almost all white (Gruenewald et al. 2013a, b; Smith 1994). Another possibility is to compare the location of FRHI's to only those SHR homicides committed by white perpetrators. In other words, the regular violence category would exclude all homicides perpetrated by non-whites (Pridemore and Freilich 2006). Similar types of decisions may also be applicable when deciding on the type of regular homicide to use for a comparison for ideologically motivated attacks committed by supporters of Al Qaeda, left wing extremists, and other groupings.

Acknowledgments This research was funded by a series of Grants from the U.S. Department of Homeland Security (DHS) Science and Technology Directorate's University Program Division; and Resilient Systems Division both directly and through the National Consortium for the Study of Terrorism and Responses to Terrorism (START), and a John Jay College Collaborative Research Award. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of DHS, START, or John Jay College.

References

Agnew R (1992) Foundation for a general strain theory of crime and delinquency. Criminology 30:47–87

Agnew R (1999) A general strain theory of community differences in crime rates. J Res Crime Delinq 36:123–155

Agnew R (2001) Building on the foundation of general strain theory: specifying the types of strain most likely to lead to crime and delinquency. J Res Crime Delinq 38:319–361

Agnew R (2010) A general strain theory of terrorism. Theor Criminol 14(2):131–153

[27] Other county-level research has found that poverty is associated with increased odds of a terrorist incident occurring in the county (see for e.g. LaFree and Bersani 2014); but these studies examined all terrorist incidents and did not disaggregate to only examine far-right attacks.

Aho JA (1990) The politics of righteousness: Idaho Christian patriotism. University of Washington Press, Seattle
Akyuz K, Armstrong T (2011) Understanding the sociostructural correlates of terrorism in Turkey. Int Crim Justice Rev 21(2):134–155
Allison PD (2001) Missing data. Sage, Thousand Oaks
Anderson E (2000) Code of the street: decency, violence, and the moral life of the inner city. W. W. Norton, New York
Bakker E (2006) Jihadi terrorists in Europe: their characteristics and the circumstances in which they joined the jihad: an exploratory study. Netherlands Institute of International Relations, Clingendael
Barkun M (1997) Religion and the racist right: the origins of the Christian Identity movement. University of California Press, Berkeley
Bellair PE (1997) Social interaction and community crime: examining the importance of neighbor networks. Criminology 35:677–703
Berrebi C (2009) The economics of terrorism and counterterrorism: What matters and is rational-choice theory helpful? RAND MG-849-OSD. In: Davis PK, Cragin KR (eds) Social science for counterterrorism. RAND Corporation, Santa Monica
Beyerlein K, Hipp JR (2005) Social capital, too much of a good thing? American religious traditions and community crime. Soc Forces 84(2):995–1013
Bjørgo T (1995) Introduction. Terror Polit Viol 7(1):1–16
Blalock HM Jr (1967) Toward a theory of minority-group relations. Wiley, New York
Blazak R (2001) White boys to terrorist men. Am Behav Sci 44(6):982–1000
Blejwas A, Griggs A, Potok M (2005) Terror from the right. SPLC Intell Rep 110:33–46
Broidy L, Agnew R (1997) Gender and crime: a general strain theory perspective. J Res Crime Delinq 34:275–306
Bursik J Jr (1988) Social disorganization and theories of crime and delinquency: problems and prospects. Criminology 26:519–551
Bursik RJ Jr, Grasmick HG (1993) Economic deprivation and neighborhood crime rates, 1960–1980. Law Soc Rev 27(2):263–283
Chermak SM (2002) Searching for a Demon: the media construction of the militia movement. Northeastern University Press, Boston
Chermak SM, Gruenewald J (2015/in press) Laying the foundation for the criminological examination of right-wing, left-wing, and Al Qaeda inspired extremism in the United States. Terror Polit Viol 27(1)
Chermak SM, Freilich JD, Shemtob Z (2009) Law enforcement training and the domestic far-right. Crim Just Behav 36(12):1305–1322
Chermak SM, Freilich JD, Parkin WS, Lynch JP (2012) American terrorism and extremist crime data sources and selectivity bias: an investigation focusing on homicide events committed by far-right extremists. J Quant Criminol 28(1):191–218
Chermak SM, Freilich JD, Suttmoeller M (2013) The organizational dynamics of far-right hate groups in the United States: comparing violent to non-violent organizations. Stud Confl Terror 36(3):193–218
Clarke RV, Newman GR (2006) Outsmarting the terrorists. Praeger, New York
Cothren J, Smith BL, Roberts P, Damphousse KR (2008) Geospatial and temporal patterns of preparatory conduct among American terrorists. Int J Comp Appl Crim Justice 32:23–41
Disha I, Cavendish JC, King RD (2011) Historical events and space of hate: hate crimes against Arabs and Muslims in Post-9/11 America. Soc Prob 58(1):21–46
Dugan L, Young J (2009) Allow extremist participation in the policy-making process. In: Frost NA, Freilich JD, Clear TR (eds) Contemporary issues in criminal justice policy: policy proposals from the american society of criminology conference. Cengage/Wadsworth, Belmont, CA
Dugan L, LaFree G, Piquero AR (2005) Testing a rational choice model of airline hijackings. Criminology 43(4):1031–1070
Durkheim E (1930) Suicide: a study in sociology translated by George Simpson and John A. Spaulding. The Free Press, New York
Ezekiel RS (1995) Inside the racist mind: portraits of american neo-nazis and Klansmen. Penguin, New York
Ferber AL (1998) White man falling: race, gender and white supremacy. Roman and Littlefield, New York
Freilich JD, Chermak SM (2009) Preventing deadly encounters between law enforcement and American far-rightists. Crime Prev Stud 25:141–172
Freilich JD, LaFree G (2015) Criminology theory and terrorism: introduction to the special issue. Terror Polit Viol 27
Freilich JD, Pridemore WA (2006) Mismeasuring militias: limitations of advocacy group data and of state-level studies of paramilitary groups. Justice Q 23:147–162

Freilich JD, Pridemore WA (2007) Politics, culture and political crime: covariates of abortion clinic attacks in the United States. J Crim Justice 35(3):323–336
Freilich JD, Pichardo-Almanzar NA, Rivera CJ (1999) How social movement organizations explicitly and implicitly promote deviant behavior: the case of the militia movement. Justice Q 16(3):655–683
Freilich JD, Chermak SM, Caspi D (2009a) Critical events in the life trajectories of domestic extremist white supremacist groups: a case study analysis of four violent organizations. Criminol Public Policy 8(3):497–530
Freilich JD, Chermak SM, Jr Simone J (2009b) Surveying American State Police Agencies about terrorism threats, terrorism sources, and terrorism definitions. Terror Polit Viol 21(3):450–475
Freilich JD, Chermak SM, Belli R, Gruenewald J, Parkin WS (2014) Introducing the United States extremist crime database (ECDB). Terror Polit Viol 26(2):372–384
Gibson JW (1994) Warrior dreams: violence and manhood in post-Vietnam America. Hill and Wang, New York
Goetz SJ, Rupasingha A, Loveridge S (2012) Social capital, religion, Walmart and hate groups in America. Soc Sci Q 93(2):379–393
Green DP, Strolovich DZ, Wong JS (1998) Defended neighborhoods, integration, and racially motivated crime. Am J Sociol 104(2):372–403
Green DP, Abelson RP, Garnett M (1999) The distinctive political views of hate-crime perpetrators and white supremacists. In: Prentice DA, Miller DT (eds) Cultural divides: understanding and overcoming group conflict. Russell Sage, New York
Gruenewald JA, Pridemore WA (2012) A comparison of ideologically-motivated homicides from the new extremist crime database and homicides from the supplementary homicides reports using multiple imputation by chained equations to hand missing values. J Quant Criminol 28:141–162
Gruenewald JA, Chermak SM, Freilich JD (2013a) Distinguishing "Loner" attacks from other domestic extremist violence: a comparison of far-right homicide incident and offender characteristics. Criminol Public Policy 12(1):65–91
Gruenewald J, Chermak SM, Freilich JD (2013b) Lone wolves and far-right terrorism in the United States. Stud Confl Terror 36(12):1005–1024
Hamm MS (1993) American skinheads: the criminology and control of hate crime. Praeger Publishers, Westport
Hamm MS (2002) In bad company: America's terrorist underground. Northeastern University Press, Boston
Hamm MS (2007) Terrorism as crime: from the order to Al-Qaeda and beyond. New York University Press, New York
Handler JS (1990) Socioeconomic profile of an American terrorist. Terrorism 13:195–213
Hewitt C (2003) Understanding terrorism in America: from the Klan to Al Qaeda. Routledge, New York
Hirchi T, Gottfredson MR (2001) Self control theory. In: Patternoster R, Bachman R (eds) Explaining criminals and crime. Roxbury, Los Angeles
Jurgensmeyer M (2003) Terror in the mind of god: the global rise of religious violence. University of California Press, Berkeley
Kaminski RJ (2008) Assessing the county-level structural covariates of police homicides. Homicide Stud 12:350–380
Kaplan J (1995) Right wing violence in North America. Terror Polit Viol 7(1):44–95
King RD, Brustein WI (2006) A political threat model of intergroup violence: Jews in Pre-World War II Germany. Criminology 44(4):867–890
King G, Zeng L (2001) Logistic regression in rare events data. Polit Anal 9:137–163
Kornhauser RR (1978) Social sources of delinquency. University of Chicago Press, Chicago
Krueger AB (2007) What makes a terrorist: economics and the roots of terrorism. Princeton University Press, Princeton
Krueger AB (2008) What makes a homegrown terrorist? Human capital and participation in domestic Islamic terrorist groups in the U.S.A. Working Paper no. 533 Princeton University Industrial Relations Section: http://www.irs.princeton.edu/pubs/pdfs/533.pdf
LaFree G, Bersani BE (2014) County-level correlates of terrorist attacks in the United States. Criminol Public Policy 13
LaFree G, Dugan L (2009) Research on terrorism and countering terrorism. Crime Justice 38:413–477
LaFree G, Dugan L, Korte R (2009) The impact of British counterterrorist strikes on political violence in Northern Ireland: comparing deterrence and backlash models. Criminology 47(1):17–45
LaFree G, Dugan L, Xie M, Singh P (2012) Spatial and temporal patterns of terrorist attacks by ETA, 1970 to 2007. J Quant Criminol 27:7–29
Lee MR (2000) Community cohesion and violent predatory victimization: a theoretical extension of cross-national opportunity theory. Soc Forces 79:683–706

Lee MR (2008) Civic community in the hinterland: toward a theory of rural social structure and violence. Criminology 46(2):447–477
Lester D (1996) Regional variation in homicide rates of infants and children. Injury Prev 2:121–123
Lipset S, Raab E (1977) The politics of unreason: right wing extremism in America, 1790–1977. University of Chicago Press, Chicago
Loftin C, Hill RH (1974) Regional subculture and homicide: an examination of the Gastil–Hackney thesis. Am Sociol Rev 39:714–724
Lyons CJ (2007) Community (dis)organization and racially motivated crime. Am J Sociol 113(3):815–863
McVeigh R (2009) The rise of the Ku Klux Klan: right-wing movements and national politics. University of Michigan Press, Michigan
McVeigh R, Cunningham D (2012) Enduring consequences of right-wing extremism: Klan mobilization and homicides in southern counties. Soc Forces 90(3):843–862
Merton RK (1938) Social structure and anomie. Am Sociol Rev 3:672–682
Messner SF, Rosenfeld R (2007) Crime and the American dream. Thomson/Wadsworth, New York
Nice DC (1988) Abortion clinic bombings as political violence. Am J Polit Sci 32:178–195
Pampel FC (2000) Logistic regression: a primer. Sage, Thousand Oaks
Parkin WS (2012) Developing theoretical propositions of far-right ideological victimization. Ph.D. dissertation, Graduate Center and John Jay College, CUNY
Pridemore WA, Freilich JD (2006) A test of recent subcultural explanations of white violence in the United States. J Crim Justice 34(1):1–16
Putnam RD (1995) Bowling alone: America's declining social capital. J Democr 6(1):65–78
Putnam RD (2000) Bowling alone: the collapse and revival of American community. Simon and Schuster, New York
Rosenfeld R, Messner SF, Baumer EP (2001) Social capital and homicide. Soc Forces 80(1):283–309
Rosenfeld R, Baumer E, Messner SF (2007) Social trust, firearm prevalence, and homicide. Ann Epidemiol 17:119–125
Royston P (2004) Multiple imputation of missing values. Stata J 43:227–241
Sageman M (2004) Understanding terror networks. University of Pennsylvania Press, Philadelphia
Sampson RJ (2012) Great American City: Chicago and the enduring neighborhood effect. University of Chicago Press, Chicago
Sampson RJ, Bartusch DJ (1998) Legal cynicism and (subcultural?) tolerance of deviance: the neighborhood context of racial differences. Law Soc Rev 32(4):777–804
Sampson RJ, Groves WB (1989) Community structure and crime: testing social disorganization theory. Am J Sociol 94:774–802
Sampson RJ, Raudenbush SW, Earls F (1997) Neighborhoods and violent crime: a multilevel study of collective efficacy. Science 277(5328):918–924
Scheitle C, Adamczyk A (2009) It takes two: the interplay of individual and group theology on social embeddedness. J Sci Study Relig 48:16–29
Shaw CR, McKay HD (1976) Juvenile delinquency and urban areas, 2nd edn. University of Chicago Press, Chicago
Shecory M, Laufer A (2008) Social control theory and the connection with ideological offenders among Israeli youth during the Gaza disengagement period. Int J Offender Therapy Comp Criminol 52(4):454–473
Silber MD, Bhatt A (2007) Radicalization in the West: the homegrown threat. New York City Police Department Intelligence Division, New York. Accessed 8 May 2011. http://www.nypdshield.org/public/SiteFiles/documents/NYPD_ReportRadicalization_in_the_West.pdf
Simcha-Fagan O, Schwartz JE (1986) Neighborhood and delinquency: an assessment of contextual effects. Criminology 24(4):667–699
Simi P, Futrell R (2010) American swastika: inside the white power movements hidden spaces of hate. Rowman and Littlefield, New York
Smith BL (1994) Terrorism in America: pipe bombs and pipe dreams. State University of New York Press, New York
Smith BL, Damphousse KR (2009) Patterns of precursor behaviors in the lifespan of an American eco-terrorist group. Criminol Public Policy 8(3):475–496
Smith BL, Morgan KD (1994) Terrorist right and left: empirical issues in profiling American terrorists. Stud Confl Terror 17:39–57
Soule SA, Van Dyke N (1999) Black church arson in the United States, 1989–1996. Ethnic Racial Stud 22:724–742
Stark R (1987) Deviant places: a theory of the ecology of crime. Criminology 25:893–909

Stern J (2003) Terror in the name of god: why religious militants kill. Harper Collins, New York
Sutherland EH, Cressey DR (1978) Criminology, 10th edn. Lippincott, New York
Suttmoeller MJ, Gruenewald J, Chermak SM, Freilich JD (2013) Killed in the line of duty: Comparing police homicides committed by far-right extremists to all police homicides. Law Enforc Exec Forum 13(1):45–64
U.S. Bureau of the Census (1990a) USA counties data file downloads: poverty. http://www.census.gov/support/USACdataDownloads.html#PVY. Accessed 14 Jan 2013
U.S. Bureau of the Census (1990b) USA counties data file downloads: population. http://www.census.gov/support/USACdataDownloads.html#POP. Accessed 14 Jan 2013
U.S. Bureau of the Census (1996) Table 1. Land area, population, and density for states and counties: 1990. http://www.census.gov/population/www/censusdata/files/90den_stco.txt. Accessed 15 Jan 2013
U.S. Bureau of the Census (2000a) USA counties data file downloads: poverty. http://www.census.gov/support/USACdataDownloads.html#PVY. Accessed 14 Jan 2013
U.S. Bureau of the Census (2000c) USA counties data file downloads: population. http://www.census.gov/support/USACdataDownloads.html#POP. Accessed 14 Jan 2013
U.S. Bureau of the Census (2000d) Population, housing units, area, and density: 2000—United States—county by state; and for Puerto Rico census 2000 summary file 1 (SF 1) 100-percent data. http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_00_SF1_GCTPH1.US05PR&prodType=table Accessed 21 Jan 2013
U.S. Bureau of the Census (2001) Mapping census 2000: the geography of U.S. diversity. www.census.gov/population/cen2000/atlas/divers.xls. Accessed 24 Jan 2013
Van Buuren S, Boshuizen HC, Knook DL (1999) Multiple imputation of missing blood pressure covariates in survival analysis. Stat Med 18:681–694
Van Dyke N, Soule SA (2002) Structural social change and the mobilizing effect of threat: explaining levels of patriot and militia organizing in the United States. Soc Prob 49:497–520
Wareham J, Cochran JK, Dembo R, Sellers CS (2005) Community, strain and delinquency: a test of a multilevel model of general strain theory. West Criminol Rev 6:117–133
Warner BD (2007) Directly intervene or call the authorities? A study of forms of neighborhood social control within a social disorganization framework. Criminology 45(1):99–128
Webb JJ, Cutter SL (2009) The geography of U.S. terrorist incidents, 1970–2004. Terror Polit Viol 21:428–449
Wilson WJ (1996) When work disappears: the world of the new urban poor. Vintage, New York
Wuthnow R (2004) Saving America? Faith-based services and the future of civil society. Princeton University Press, Princeton